



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Allan M. Miller et al.
Serial No. : 09/407,605
Filed : September 28, 1999
Title : OPTIMIZED MESSENGER RNA

Art Unit : 1643
Examiner : H. Robinson

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Commissioner for Patents
Washington, D.C. 20231

AMENDMENT AND RESPONSE

In response to the action mailed March 29, 2001, please amend the application as follows:

In the Claims:

Please cancel claims 80, 95, 109, 121, 126 and 131.

All the pending claims are reproduced below for the Examiner's convenience. Please amend claims 64, 66, 67, 69, 72, 73, 75, 76, 78, 79, 81-83, 85-87, 89-92, 94, 97-106, 108, 113-116, 119, 120, 125, 130 and 135 as follows.

--64. (Amended) A synthetic nucleic acid sequence which encodes a protein wherein at least one non-common codon or less-common codon has been replaced by a common codon encoding the same amino acid residue as the non-common or less-common codon, and the synthetic nucleic acid sequence comprises a continuous stretch of at least 150 codons all of which are common codons, wherein said continuous stretch encodes the protein or a fragment thereof.

65. (Reiterated) The nucleic acid sequence of claim 64, wherein the continuous stretch occurs in a nucleic acid sequence which is selected from a group of sequences consisting of a

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